RINGKASAN

Bawang merah merupakan salah satu jenis sayuran yang berkontribusi terhadap inflasi. Pengembangan produksi bawang merah terkendala oleh lahan pertanian yang semakin terbatas. Kesetaraan produktivitas lahan pasir pantai perlu ditingkatkan melalui pemanfaatan pupuk bahan organik, salah satunya bokashi. Penggunaan bokashi limbah tongkol jagung diharapkan dapat membantu menyuburkan tanaman. Penelitian ini bertujuan untuk: (1) mengetahui keragaman pertumbuhan dan hasil beberapa varietas bawang merah, (2) mengetahui respon pertumbuhan dan hasil beberapa varietas bawang merah terhadap pemberian bokashi limbah tongkol jagung, (3) mengetahui interaksi dan kombinasi terbaik antara beberapa varietas bawang merah dan pemberian bokashi limbah tongkol jagung terhadap keragaman pertumbuhan dan hasil bawang merah.

Penelitian dilaksanakan di *screen house* dan Laboratorium Agronomi dan Hortikultura Fakultas Pertanian UNSOED, Purwokerto pada bulan November 2020 hingga Februari 2021. Penelitian berupa percobaan polibag menggunakan Rancangan Acak Kelompok Lengkap faktorial. Faktor pertama adalah macam varietas bawang merah yaitu Ambassador, Bima Brebes, Lokananta, Mentes, Sanren, Tiron, Triula dan Tuk-tuk. Faktor kedua adalah dosis bokashi limbah tongkol jagung yaitu 0 $t.ha^{-1}$ (tanpa bokashi) dan 20 $t.ha^{-1}$. Data yang diperoleh dianalisis menggunakan analisis sidik ragam dan uji lanjut *Duncan's Multiple Range Test* (*DMRT*) pada taraf nyata 5%.

Hasil penelitian menunjukkan bahwa perbedaan varietas memberikan respon berbeda-beda terhadap pertumbuhan dan hasil bawang merah. Varietas Lokananta memiliki nilai tertinggi pada variabel tinggi tanaman (39,72 cm), jumlah daun (23,67 helai), luas daun (588,731 cm^2), diameter umbi (2,624 cm), bobot umbi segar (53,91 g), dan bobot umbi kering (46,36 g). Varietas Sanren memiliki nilai tertinggi pada klorofil daun (8,82 $mg.L^{-1}$). Varietas Ambassador memiliki milai tertinggi paada jumlah umbi (7,79 umbi). Varietas Tuk-tuk memiliki nilai tertinggi pada variabel serapan N (361,12 $g.tan^{-1}$). Pemberian bokashi limbah tongkol jagung dengan dosis 20 $t.ha^{-1}$ mampu meningkatkan rata-rata tinggi tanaman bawang merah sebesar 12.38 %. Pengaruh interkasi antara perbedaan varietas dan pemberian bokashi diperoleh pada variabel serapan nitrogen. Tanaman tertinggi terdapat pada varietas Lokananta dengan perlakuan bokashi dosis 20 $t.ha^{-1}$ dengan yaitu 492,05 $g.tan^{-1}$.

Kata kunci : bawang merah, bokashi, limbah tongkol jagung

SUMMARY

Shallots are one type of vegetable that contributes to inflation. The development of shallot production is constrained by increasingly limited agricultural land. Equality of productivity of coastal sandy land needs to be improved through the use of organic fertilizers, one of which is bokashi. The use of corncob waste bokashi is expected to help fertilize plants. This study aims to: (1) determine the diversity of growth and yield of several shallot varieties, (2) to determine the growth and yield responses of several shallot varieties to corncob waste bokashi, (3) to determine the best interaction and combination between several shallot varieties. and the provision of corncob waste bokashi on the diversity of growth and yield of shallots.

The research was carried out at the screen house and the Agronomy and Horticulture Laboratory of the Faculty of Agriculture UNSOED, Purwokerto from November 2020 to February 2021. The study was a polybag experiment using a factorial Completely Randomized Block Design. The first factor is the variety of shallots, namely Ambassador, Bima Brebes, Lokananta, Mentes, Sanren, Tiron, Triula and Tuk-tuk. The second factor was the dose of corncob waste bokashi, namely 0 $t.ha^{-1}$ (without bokashi) and 20 $t.ha^{-1}$. The data obtained were analyzed using analysis of variance and Duncan's Multiple Range Test (DMRT) at a 5% significance level.

The results showed that different varieties give different responses to the growth and yield of shallots. The Lokananta variety had the highest value on the variables of plant height (39.72 cm), number of leaves (23.67 pieces), leaf area (588.731 cm^2), tuber diameter (2.624 cm), fresh bulb weight (53.91 g), and dry tuber weight (46.36 g). The Sanren variety had the highest value in leaf chlorophyll (8.82 $mg.L^{-1}$). The Ambassador variety had the highest milai in the number of tubers (7.79 pieces). The Tuk-tuk variety had the highest value on the N uptake variable (361.12 $g.tan^{-1}$). Giving bokashi corncob waste with a dose of 20 $t.ha^{-1}$ was able to increase the average height of shallot plants by 12.38%. The effect of interaction between different varieties and bokashi administration was obtained on the nitrogen uptake variable. The highest plant was found in the Lokananta variety with bokashi treatment at a dose of 20 $t.ha^{-1}$ with 492.05 $g.tan^{-1}$.

Keywords: Shallots, bokashi, corncob waste